Claims

1. An automatic belt tensioner (1) comprising a basic part (2) that is connected to a tensioning part (3) so as to be rotatable about a common axis of rotation (4), a helical spring (11) that is connected to the basic part (2) and the tensioning part (3), and a wrapping bush (14), which is wrapped at least in some areas by a helical spring (11) at a radial enveloping force,

characterized in that

the material of the wrapping bush (14) comprises reinforced plastic.

2. An automatic belt tensioner (1) according to claim 1,

characterized in that

the material is fiber-reinforced, comprising particularly glass fibers for reinforcement.

3. An automatic belt tensioner (1) according to claim 1 or 2,

characterized in that

the material is plastic sphere-reinforced, comprising particularly glass spheres for reinforcement.

4. An automatic belt tensioner (1) according to any one of the claims 1 to 3,

characterized in that

the wrapping bush (14) can accommodate left- and right-handed helical springs (11).

5. An automatic belt tensioner (1) according to any one of the claims 1 to 4,

characterized in that

a peripheral edge (26) of the wrapping bush (14) comprises inclines (30, 31) that correspond in one area to the course of a left-handed and in another area to the course of a right-handed spring turn.

6. An automatic belt tensioner (1) according to any one of the claims 1 to 5,

characterized in that

the wrapping bush (14) is enveloped by less than one full turn (13, 44) of the helical spring (11), particularly by more than or equal to a half or 0.7 turn.

7. An automatic belt tensioner (1) according to any one of the claims 1 to 6,

characterized in that

the wrapping bush (14) on the free end thereof (43) comprises a chamfered peripheral edge (26).

8. An automatic belt tensioner (1) according to at least one of the claims 1 to 7, the wrapping bush (14) surrounding a spring sleeve (15) at least in some areas,

characterized in that

a peripheral edge (27) of the wrapping bush (14) opposite the free end (43) comprises at least one retaining step (28, 29), which engages with a recess (38, 48) provided in the spring sleeve so as to resist rotation.

9. An automatic belt tensioner (1) according to at least one of the claims 1 to 8, the wrapping bush (14) surrounding a spring sleeve (15) at least in some areas,

characterized in that

the spring sleeve (15) on the inside (49) comprises at least one depression (35) for receiving lubricant.

10. An automatic belt tensioner (1) according to claim 9,

characterized in that

the depression (35) extends in the axial direction, particularly having a notched design in the cross-sectional view.

11. An automatic belt tensioner (1) according to at least one of the claims 1 to 10, a spring sleeve (15) that is surrounded by a wrapping bush (14) at least in some areas comprising a supporting base collar (37),

characterized in that

the supporting base collar (37) is broken down into several areas (51, 52, 53, 54, 55) that are distributed across the circumference.

12. An automatic belt tensioner (1) according to at least one of the claims 1 to 11, a spring sleeve (15) that is surrounded by a wrapping bush (14) at least in some areas comprising a supporting base collar (37),

characterized in that

at least one area (54) of the base collar (37) comprises a projecting spring end support (41).

13. An automatic belt tensioner (1) according to at least one of the claims 1 to 12, the wrapping bush (14) surrounding a spring sleeve (15) at least in some areas,

characterized in that

the wrapping bush (14) and the spring sleeve (15) have been produced together in a multicomponent tool.